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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,318	08/22/2003	Ronald L. Mahany	14366US02	9697
23446 7590 02/19/2009 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER MAI, THIEN T				
ART UNIT 2887		PAPER NUMBER		
MAIL DATE 02/19/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/646,318

**Applicant(s)**

MAHANY ET AL.

**Examiner**

Thien T. Mai

**Art Unit**

2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 56-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 56-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/08/2008 has been entered.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim(s) 56, 60, 65, 69 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandstedt* (US 4415065 A) in view of *Allais* (US 4794239 A) and *Gombrich* (US 4916441 A).

Re claims 56, 60, 65, 69, *Sandstedt* discloses a handheld wireless communications device having at least one antenna, comprising:

a terminal that has a microphone and a speaker (items 33 and 35 in Fig. 1A) that provide voice input/output, wherein the terminal provides a voice recognition control system that uses the microphone, wherein the terminal provides a graphical user interface that includes a display 56 (Fig. 3);

a wireless transceiver arranged to transmit and receive radio frequency signals, the transceiver being operatively coupled with the at least one antenna (Fig. 1A), the transceiver being operatively coupled to a rechargeable battery;

a sensor that senses an optical OCR image; and

a connector arranged to couple the wireless transceiver with the terminal and to transmit signals, wherein the terminal is coupled with the connector and is arranged to standardize logic levels and a format of the signals transmitted over the connector (the connector here is interpreted as anything that connects or is coupled between the antenna and the terminal and is to carry logic signals; in this case, *Sandstedt* teaches the interior of handheld device includes at least a microprocessor and RAM that carry logic information).

*Sandstedt* is silent with respect to CCD sensor.

*Allais* discloses a CCD sensor for scanning OCR characters.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Allais* in order to read the OCR characters taught in *Sandstedt*.

*Sandstedt* is further silent with respect to a touch display.

*Gombrich* discloses that touch display technology is too old and well known in the art (see item 22d in Fig. 3-8, col. 6 lines 54-55)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the CCD teachings of *Gombrich* to facilitate data input without requiring space, wiring, and controls for buttons.

3. Claim(s) 57-59, 61-63, 66-68, 70-72 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandstedt* (US 4415065 A) modified by *Allais* (US 4794239 A) and *Gombrich* (US 4916441 A) further in view of *Katner* (US 5,059,951)

Re claims 57-59, 61-63, 66-68, 70-72, *Sandstedt* as modified by *Allais* and *Gombrich* does not teach at least one flat antenna comprises two antennas having different structure relative to each other.

*Katner* discloses two different flat coil antennas 29-30 (Fig. 4) embedded in a scan terminal for reading RFID tags 3 (Fig. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Katner* in order to provide means to read/scan additional type of tag beside barcode.

4. Claim(s) 64 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandstedt* (US 4415065 A) modified by *Allais* (US 4794239 A) and *Gombrich* (US 4916441 A) further in view of *Zouzoulas et al.* (5,059,778)

Re claim 64, *Zouzoulas et al.* discloses an apparatus comprising a terminal 10, 100 and communication module 30, 300 (Fig. 1-2, col. 8 line 37) wherein power to the wireless battery operated module 300 is removed when inactivity is sensed (col. 8 lines 60-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Zouzoulas et al.* in order to conserve the battery power of the handheld battery operated apparatus.

***Remarks***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien T. Mai whose telephone number is 571-272-8283. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thien T Mai/  
Examiner, Art Unit 2887

/EDWYN LABAZE/  
Primary Examiner, Art Unit 2887

